Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended)   A hyperlinked broadcast system comprising:

a video source providing video information for a video program including a plurality of consecutive video frames;

an annotation system ~~tracing~~ tracking movement of two or more video objects appearing in each of the plurality of consecutive video frames from a first location to a second location and generating annotation data and annotation data timing information, the annotation data including only one mask for each video frame of the plurality of consecutive video frames, each mask being stamped with the corresponding annotation data timing information based on a frame time of the corresponding video frame, each mask including location and graphics data of two or more graphics images to be overlaid on the two or more video objects appearing in the corresponding video frame; and

an augmented video information transmission generator receiving said annotation data, said video information, and said annotation data timing information, said augmented video information transmission generator generating an augmented video transmission signal comprising said annotation data, said annotation data timing information, and said video information, and transmitting the augmented video transmission signal to a receiver,

wherein said augmented video information transmission generator associates said video information with said annotation data using said annotation data timing information,

wherein the receiver receiving the augmented video transmission signal is programmed, for each of the plurality of consecutive video frames, to:

compare a current annotation data timing information with a current frame time of a current video frame;

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retrieve the location and graphics data of the two or more graphics images from the identified mask if the comparison results in a match; and

overlay the two or more graphics images on the corresponding two or more video objects appearing in the video frame based on the retrieved location and graphics data,

wherein the overlaying of the two or more graphics images is synchronized on a frame-by-frame basis with the movement of the two or more video objects from the first location to the second location over the plurality of consecutive video frames.

2.   (Original)   The system of claim 1 wherein said augmented video information transmission generator comprises a vertical blanking interval insertion device.

3.   (Original)   The system of claim 1 wherein said augmented video information transmission generator comprises at least one of a vertical ancillary data insertion device and a digital video data multiplexer.

4.   (Original)   The system of claim 1 wherein said annotation data timing information comprises at least one of timestamp information, timecode information, frame numbering information, global time of day information, annotation data device commands, and a video program identifier.

5.   (Original)   The system of claim 1 wherein said video information comprises digital video data.

6.   (Original)   The system of claim 1 wherein said video information comprises an analog video signal.

7.   (Original)   The system of claim 1 further comprising:
a post production environment; and

a headend comprising said augmented video information transmission generator,

wherein said video information and said annotation data timing information are combined by said post production environment and transmitted to said headend.

8.   (Original)   The system of claim 7 wherein said headed is a cable headend.

9.   (Original)   The system of claim 7 wherein said headend is a satellite headend.

10-13. (Canceled)

14.   (Previously Presented)   The system of claim 1 wherein the receiver displays said annotation data in response to a viewer request.

15-16. (Canceled)

17.   (Previously Presented)   The system of claim 1 wherein the mask comprises location information of the two or more objects in the corresponding video frame.

18.   (Previously Presented)   The system of claim 17 wherein said location information includes a graphics location reference that represents a fixed relation to a set of pixels associated with each said object.

19.   (Original)   The system of claim 18 wherein said graphics location reference includes an upper left most pixel in said associated pixel set.

20.   (Original)   The system of claim 18 wherein said graphics location reference includes a centroid pixel of said associated pixel set.

21.   (Previously Presented)   The system of claim 1 wherein the mask comprises location and shape information of the two or more objects in the corresponding video frame.

22-34. (Canceled)

35.   (Currently Amended) A method of generating a hyperlinked video signal comprising:

receiving video information for a video program including a plurality of consecutive video frames;

tracking ~~tracking~~ movement of two or more video objects appearing in each of the plurality of consecutive video frames from a first location to a second location and generating annotation data and annotation data timing information, the annotation data including only one mask for each video frame of the plurality of consecutive video frames, each mask being stamped with the corresponding annotation data timing information based on a frame time of the corresponding video frame, each mask including location and graphics data of two or more graphics images to be overlaid on the two or more video objects appearing in the corresponding video frame;

communicating said annotation data timing information, said annotation data, and said video information to an augmented video information transmission generator;

synchronizing said video information with said annotation data in response to said annotation data timing information by said augmented video information transmission generator and generating an augmented video transmission signal comprising said annotation data, said annotation data timing information, and said video information;

transmitting the augmented video transmission signal to a receiver, wherein the receiver receiving the augmented video transmission signal is programmed, for each of the plurality of consecutive video frames, to:

compare a current annotation data timing information with a current frame time of a current video frame;

retrieve the location and graphics data of the two or more graphics images from the identified mask if the comparison results in a match; and

overlay the two or more graphics images on the corresponding two or more video objects appearing in the video frame based on the retrieved location and graphics data,

wherein the overlaying of the two or more graphics images is synchronized on a frame-by-frame basis with the movement of the two or more video objects from the first location to the second location over the plurality of consecutive video frames.

36. (Original) The method of claim 35 wherein said augmented video information transmission generator comprises a vertical blanking interval insertion device.

37. (Original) The method of claim 35 wherein said augmented video information transmission generator comprises at least are of a vertical ancillary data insertion device and a digital video data multiplexer.

38. (Original) The method of claim 35 wherein said annotation data timing information comprises at least one of timestamp information, timecode information, frame numbering information, global time of day information, annotation data device commands, and a video program identifier.

39. (Original) The method of claim 35 wherein said video information comprises digital video data.

40. (Original) The method of claim 35 wherein said video information comprises an analog video signal.

41. (Original) The method of claim 35 further comprising inserting said annotation data timing information in a vertical blanking interval of an analog video signal.

42.   (Original)   The method claim 35 further comprising inserting said annotation data timing information in a vertical ancillary data region of a digital video signal.

43.   (Original)   The method of claim 35 wherein said communicating step comprises transmitting said timing information and said video information to a broadcast network and subsequently to said augmented video information transmission generator.

44-45. (Canceled)

46.   (Previously Presented)   The method of claim 35 wherein the mask comprises location information of the two or more objects in the corresponding video frame.

47.   (Previously Presented)   The method of claim 46 wherein said location information includes a graphics location reference that represents a fixed relation to a set of pixels associated with each said object.

48.   (Original)   The method of claim 47 wherein said graphics location reference includes an upper left most pixel of said associated pixel set.

49.   (Original)   The method of claim 48 wherein said graphics location reference includes a centroid pixel of said associated pixel set.

50.   (Previously Presented)   The method of claim 35 wherein the mask comprises location and shape information of the two or more objects in the corresponding video frame.

51.   (Previously Presented)   The method of claim 50 wherein said shape information is represented by a graphical overlay of each said object.

52.   (Previously Presented)   The method of claim 50 wherein said shape information is represented by an outline of each said object.

53-54. (Canceled)

55.   (Previously Presented)   The system of claim 1, wherein the annotation data further includes a plurality of object data packets, the mask further including an identifier to an object mapping table included in one or more of the plurality of object data packets, the object mapping table including at least one entry with an indicia from the corresponding mask identifying a particular video object, the entry further associating the indicia to information data structures included in one or more of the plurality of object data packets, the information data structures including information for the particular video object.

56.   (Previously Presented)   The system of claim 55 wherein the to:

retrieve the identifier of the object mapping table from the corresponding mask responsive to a user selection associated with the overlaid graphics image;

retrieve the object mapping table based on the retrieved identifier;

identify the indicia in the corresponding mask for the particular video object for which the graphics image was overlaid;

locate the entry in the object mapping table with the identified indicia;

identify the information data structures associated with the located entry;

retrieve the information in the identified information data structures; and

display the retrieved information on the display device.

57-60. (Canceled)

61. (Previously Presented) The system of claim 1, wherein the overlaying of the two or more graphics images is for alerting a viewer of interactive data associated with the two or more video objects prior to the viewer transmitting an interactive command with respect to one of the two or more video objects.

62. (Previously Presented) The method of claim 35, wherein the overlaying of the two or more graphics images is for alerting a viewer of interactive data associated with the two or more video objects prior to the viewer transmitting an interactive command with respect to one of the two or more video objects.

63. (New) A hyperlinked broadcast system comprising:

a video source providing video information for a video program including a plurality of video frames;

an annotation system generating annotation data and annotation data timing information, the annotation data including a plurality of masks and a plurality of object data packets, each mask corresponding to a particular video frame of a video program and including graphics data associated with one or more video objects in the particular video frame, each mask being associated with the corresponding annotation data timing information and with an identifier to an object mapping table included in at least a particular one of the plurality of object data packets, the object mapping table including an entry associated with each of the one or more video objects in the particular video frame, each entry in the object mapping table referencing one or more information data structures included in one or more of the plurality of object data packets, the information data structures including information associated with the corresponding video object; and

an augmented video information transmission generator receiving said annotation data, said video information, and said annotation data timing information, said augmented video information transmission generator generating an augmented video transmission signal

comprising said annotation data, said annotation data timing information, and said video information, and transmitting the augmented video transmission signal to a receiver, wherein said augmented video information transmission generator associates said video information with said annotation data using said annotation data timing information.

64.   (New) The hyperlinked broadcast system of claim 63, wherein the receiver receiving the augmented video transmission signal is programmed to:

compare the annotation data timing information for a particular mask with a frame time of a current video frame;

retrieve the graphics data from the particular mask in response to a match; and

overlay one or more graphics images generated based on the retrieved graphics data on the one or more video objects appearing in the current video frame.

65.   (New) The system of claim 64, wherein the receiver is further programmed to draw the one or more graphics images on a frame-by-frame basis based on the graphics data included in a plurality of masks, the drawing of the one or more graphics images being synchronized to the corresponding video frame based on the annotation data timing information associated with the plurality of masks.

66.   (New) The system of claim 65, wherein the receiver is further configured to:

receive a user selection associated with one of the overlaid graphics images for a particular video frame;

retrieve the identifier of the object mapping table from the mask corresponding to the particular video frame responsive to the user selection;

retrieve the object mapping table based on the retrieved identifier;

locate the entry in the object mapping table for the video object associated with the user selection;

identify the information data structures referenced in the located entry;

retrieve the information in the information data structures; and

display the retrieved information on a display device.

67.   (New) A method of generating a hyperlinked video signal comprising:

receiving video information for a video program including a plurality of video frames;

generating annotation data and annotation data timing information, the annotation data including a plurality of masks and a plurality of object data packets, each mask corresponding to a particular video frame of a video program and including graphics data associated with one or more video objects in the particular video frame, each mask being associated with the corresponding annotation data timing information and with an identifier to an object mapping table included in at least a particular one of the plurality of object data packets, the object mapping table including an entry associated with each of the one or more video objects in the particular video frame, each entry in the object mapping table referencing one or more information data structures included in one or more of the plurality of object data packets, the information data structures including information associated with the corresponding video object;

communicating said annotation data timing information, said annotation data, and said video information to an augmented video information transmission generator;

associating said video information with said annotation data in response to said annotation data timing information and generating an augmented video transmission signal comprising said annotation data, said annotation data timing information, and said video information; and

transmitting the augmented video transmission signal to a receiver.

68.   (New) The method of claim 67 further comprising:

comparing the annotation data timing information for a particular mask with a frame time of a current video frame;

retrieving the graphics data from the particular mask in response to a match; and

overlaying one or more graphics images generated based on the retrieved graphics data on the one or more video objects appearing in the current video frame.

69.   (New) The method of claim 68, wherein the overlaying further includes:

drawing the one or more graphics images on a frame-by-frame basis based on the graphics data included in a plurality of masks, the drawing of the one or more graphics images being synchronized to the corresponding video frame based on the annotation data timing information associated with the plurality of masks.

70.   (New) The method of claim 69 further comprising:

receiving a user selection associated with one of the overlaid graphics images for a particular video frame;

retrieving the identifier of the object mapping table from the mask corresponding to the particular video frame responsive to the user selection;

retrieving the object mapping table based on the retrieved identifier;

locating the entry in the object mapping table for the video object associated with the user selection;

identifying the information data structures referenced in the located entry;

retrieving the information in the information data structures; and

displaying the retrieved information on a display device.